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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/529,870

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Kouji Yamashita

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EXAMINER

ALI, MOHAMMAD M

ART UNIT

PAPER NUMBER

3744

NOTIFICATION DATE

DELIVERY MODE

05/17/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/529,870	Applicant(s) YAMASHITA ET AL.	
	Examiner MOHAMMAD M. ALI	Art Unit 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on faxed on 05/10/10.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 27-29 and 31-32 is/are pending in the application.
- 4a) Of the above claim(s) 1-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-29, 31 and 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/13/10</u> . | 6) <input type="checkbox"/> Other: _____ |

.Response to Amendment

The proposed amendments for claims 27, 28 and 29 faxed on 05/10/10 have been accepted and entered.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action.

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 27-29** are rejected under 35 U.S.C. 102(b) as being anticipated by Kimmel et al (US 3,070,977) a reference from an IDS recently filed by the Applicants.

In regard to claims 27-28, Kimmel et al teaches a pressure pulsation reduction equipment of refrigeration cycle equipment comprising a refrigeration cycle including a compressor (2) (see Fig. 1) which is connected to a pipe (32) that is a flow channel; and a pressure pulsation reducer (6) which is installed on at least one of a high pressure side and a low pressure side of the compressor (2) (see Fig. 1), the pulsation reducer (6) including a flow-channel separator (32) which separates the flow channel of the pipe (32) into first flow channel (the flow which enters the pipe 32 from the pipe 4) and a second flow channel (through plurality of holes 42); and a plurality of small holes (42 Fig. 1) and the flow-channel separator (32) formed open on one end (the open end of 32 is connected with the compressor 2 via pipe 4, see Fig. 1) and closed end (the pipe 32 has been closed by the disk 38, see Fig. 10) on the downstream side and in contact with a

Art Unit: 3744

flow-channel wall (32/28)) on another end (see Fig. 1); a nozzle (48) is formed on the downstream side of the flow channel.

The above disclosure of Kimmel et al discloses the limitations of claims 27, 28 and 29.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 31-32 are** rejected under 35 U.S.C. 103 (a) as being unpatentable over Kimmel ET al.

In regard to claims 31, Kimmel et al teaches a pressure pulsation reducer (6) on a compressor (2, see Fig. 1) with a plurality of small holes (42, see Fig. 1), but do not explicitly teach that the holes have a diameter up to 10 mm or that teach the pressure pulsation reduction equipment of refrigerant cycle equipment wherein a diameter of each small hole of the plurality of small holes us up to 10 mm or that the plurality of small holes is up to 10% where the open area ratio is a ratio of a total cross-sectional area of the plurality of small holes.

To choose a specific dimension of a known parameter is simply discovering an optimum value of a result effective variable. Therefore, it is further mentioned that it has been held that discovering an optimum value of a result effective variable

Art Unit: 3744

involves only routine skill in the art. In re Boesch, 617 F.2d 272,205 USPQ 215 (CCPA 1980).

Response to Arguments

Applicant's proposed amendment filed 05/10/10 have been fully considered but they are moot in view of the new ground of rejections by one of the references of the IDS newly filed by the Applicants as explained above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD M. ALI whose telephone number is (571)272-4806. The examiner can normally be reached on Monday through Thursday from 8.30 am to 12 Noon and from 1 pm to 5.30 pm and on Friday from 6 am to 11.30 am and from 2.30 pm to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J. Tyler can be reached on 571-272-4808. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mohammad M Ali/
Primary Examiner, Art Unit 3744